

REMARKS

Claims 3-8 and 11-24 are pending in this application. By this Amendment, the specification is amended, claims 1 and 9 are canceled, claims 3, 8, 11, 20 and 21 are amended, and claims 23 and 24 are added. Reconsideration based on the above amendments and following remarks is respectfully requested.

Claims 20 and 21 have been amended to reflect changes in claim dependency only and not to overcome prior art.

The specification has been amended to eliminate a typographical error and for clarification purposes only. No new matter is added. Support for this amendment is found in the original disclosure, at least at page 18, lines 3-7.

Applicants appreciate the Office Action's indication that claims 8 and 19 are allowed, and claims 4, 5 and 12-16 contain allowable subject matter.

I. Pending Claims 3-8 and 11-24 Define Patentable Subject Matter

The Office Action rejects claims 1, 3, 6, 7, 9, 11, 17, 18 and 20-22 under 35 U.S.C. §103(a) over U.S. Patent No. 6,037,920 to Mizutome et al. (hereinafter "Mizutome") in view of U.S. Patent No. 4,923,285 to Ogino et al. (hereinafter "Ogino"). Claims 1 and 9 have been canceled. Thus, the rejection is respectfully traversed with respect to claims 3, 6, 7, 11, 17, 18 and 20-22.

Regarding independent claims 3 and 11, Mizutome, alone or in combination with Ogino, fails to disclose, teach or suggest "varying a frequency of the driving signal discontinuously with respect to the sensed temperature to exclude a predetermined frequency", as recited in claim 3, and similarly set forth in claim 11.

In contrast, Mizutome, at least in Fig. 5B and associated disclosure, teaches using the same frequencies at temperatures lower and higher than 30 °C. Thus, in Mizutome, no particular frequency is excluded.

Regarding independent claims 6 and 17, Mizutome and Ogino, alone or in combination, fail to teach or suggest "setting a driving frequency of each pixel of the liquid crystal panel so that, when the temperature is -20°C , each pixel is driven at a frequency not greater than 1.28 kHz", as set forth in claim 6, and similarly set forth in claim 17.

The Office Action admits that neither Mizutome nor Ogino disclose varying a frequency of the driving signal when the temperature of the liquid crystal panel is -20°C . In spite of this shortcoming, the Office Action asserts that Ogino, at col. 10, lines 1-8, discloses driving at a frequency not greater than 1.20 kHz, as well as at a frequency not greater than 2.56 kHz when the temperature is $+25^{\circ}\text{C}$.

Applicants respectfully submit that the Examiner's interpretation of Ogino is misplaced. For example, neither Mizutome nor Ogino disclose varying a frequency of the driving signal at temperatures less than 0°C .

For at least the reasons discussed above, Applicants submit that independent claims 3, 6, 11 and 17 are patentable over the applied art. Claims 7, 18 and 20-22, which depend from independent claims 6 and 17, respectively, also are patentable over the applied art for at least the reasons discussed above. Withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

New claim 23, which depends from independent claim 6, clarifies that the lowest frequency at $+25^{\circ}\text{C}$ is 0.256 kHz. Support for this feature is found in the original specification, at least in Fig. 8 and associated disclosure. As shown in Fig. 8, the dielectric anisotropy undesirably varies when drive is performed at frequencies less than 0.256 kHz at temperatures $+25^{\circ}\text{C}$.

In contrast, Mizutome, in tables at columns 6, 7 and 8, teaches driving at frequencies lower than 0.256 kHz at temperatures $+25^{\circ}\text{C}$, such as, for example, 0.056 kHz at the temperature including $+25^{\circ}\text{C}$. (See, for example, table in col. 8 of Mizutome.)

Thus, for at least the reasons discussed above, Applicants respectfully submit that new claim 23 is patentable over the applied art.

New claim 24, which depends from allowed independent claim 8, includes additional features of the invention. Applicants submit that claim 24 also is patentable over the applied art.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 3-8 and 11-24 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

George P. Simion
Registration No. 47,089

JAO:GPS/jam

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OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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